

IN THE DRAWINGS:

Fig. 6 has been amended to change the reference numeral 53 to the numeral 54, and change numeral 55 to numeral 56.

REMARKS

Claims 1-9, 11-20 and 28-35 are in this application and are presented for consideration. Claims 1, 2, 4, 6, 11-13, and 15-20 have been amended, claims 21-27 have been canceled and new claims 28-35 have been added.

The specification, drawings and claims have been amended to address the Examiner's objections, incorporate the Examiner's suggestions and to place the application in better form. The claims have also been amended in accordance with the Examiner's indication of allowable subject matter, and to further highlight and more clearly point out the important features of the invention. Applicant thanks the Examiner for the careful reading of this application, for pointing out discrepancies, for providing suggestions, and indicating allowable subject matter.

New independent claim 31 has been added to include the features of claims 1 and 15. The Examiner has indicated that the features of claim 15 cause the present invention to define over the prior art. It is Applicant's position that independent claim 31 is now allowable.

Claim 1 has been amended to include the features of claim 10. The rejections with regard to original claim 1 are therefore now moot. Claim 10 has been rejected as being obvious over Danforth '066 in view of Upton '161.

Claim 1 now sets forth that the pump is a chopper pump. The rejection indicates that Danforth does not expressly disclose a chopper pump. The rejection uses Upton to disclose a chopper pump in column 1 lines 34 to 38. Applicant has reviewed this portion of Upton and finds this portion to describe a centrifugal type pump. Applicant finds no indication in this portion of a chopper pump, or any indication that the centrifugal type pump of Upton performs

any chopping function. Applicant notes that while many chopper pumps are of a centrifugal type, not all centrifugal pumps are chopper pumps. There are many centrifugal pumps which are not chopper pumps, and there are many chopper pumps which are not centrifugal type pumps. Therefore the description of a centrifugal type pump in Upton, especially without some teaching of a chopping function, is not a teaching of a chopper pump. This portion of Upton therefore does not anticipate the chopper pump of amended claim 1.

Even if chopper pumps are known, applicant does not find any suggestion or motivation to add a chopper pump to Danforth. Applicant finds no indication in Danforth to replace either of the pumps 116 or 123 with a pump that performs a chopping function. Danforth clearly separates any pumps from any chopping function. Applicant notes that Danforth provides toothed rolls 66 and 67 which perform a high degree of pulping. Applicant finds no indication in the applied prior art that a chopper type pump would produce the same high degree of pulping as the toothed rolls 66 and 67. Therefore it is applicant's position that it is not obvious to place any pulping function in Danforth with a chopper pump. Amended claim 10 therefore further cannot be obvious in view of the applied prior art.

Applicant also notes that Upton has blades 4 and 8 which pulp waste material into small particles, column 4 line 63 and 64. However applicant finds no teaching nor suggestion that these blades perform a pumping function. Therefore blades 4 and 8 of Upton do not have all of the features of the chopper pump of amended claim 1. The blades 4 and 8 of Upton therefore cannot anticipate the chopper pump of amended claim 1.

New claim 32 includes many of the features of original claim 1 and 11. Claim 11 has

been rejected as being obvious over Danforth in view of Plaskon '714.

New claim 32 sets forth a recirculation duct connected to the first pump and the container. The first pump is then set forth as removing a portion of the waste material and water from the container, and recirculating another portion of the waste material and water back into the container through the recirculation duct. This is shown in the embodiment of figure 6 where pump 27 feeds a portion of the material out of the container through delivery ducts 29 and 33, and feeds another portion of the material back into the container through recirculation duct 29A.

The rejection indicates that Danforth does not disclose expressly a recirculation duct. Plaskon is used to disclose a recirculation duct and a pump. It appears that elements 16 and 14 are used in figure 1, and elements 56 and 54 in figure 2, of Plaskon to disclose the recirculation duct. However applicant finds no teaching nor suggestion of an arrangement between a pump and any of these structures in Plaskon where one portion is removed and another portion is recirculated back into a container. Elements 16/14 and 56/53 of Plaskon do not divide material, especially into a portion which is removed from a container. Applicant finds no teaching nor suggestion of any other structure in Plaskon which divides material from a container into two portions, removes one portion and recirculates the other. Therefore the combination of Danforth and Plaskon fails to anticipate all of the features of new independent claim 32. Claim 32 therefore defines over Danforth and Plaskon.

Element 30 of Plaskon is used by the rejection to anticipate the pump of the present invention. Applicant notes that neither element 30 nor element 70 appears to be described in

the specification of Plaskon. Instead the specification indicates that impellers 12 and 52 are driven in a flow pattern so that the slurry is forced into the lines 14/16 and 56/54. Elements 30 and 70 therefore do not seem to have a pumping function.

Even if the pump and recirculation duct arrangement of claim 32 is known, applicant finds no incentive to place such an arrangement in Danforth. Danforth shows flow from pulper 47 to chest 118, but not in the reverse direction. A person of ordinary skill would therefore not be led to modify Danforth to have a recirculation arrangement as set forth in claim 32. The rejection indicates that Danforth describes a bypass line. However this bypass line does not feed material back into pulper 47, but instead further emphasizes that all the flow is to be from the pulper 47 to the chest 118.

New claim 33 depends from claim 32 and sets forth that the pump and recirculation duct are arranged to flow waste out the longitudinal end connected to the pump. However, Plaskon does not recirculate water to generate a flow of paper residues which has to be removed from the container. Plaston discloses a device wherein water is re-circulated for the purpose of mixing a slurry and preparing a slurry for subsequent feeding to a papermaking machine. The whole flow of slurry taken in by the pump is recirculated. The machine disclosed by Plaskon is apparently a discontinuous machine, where a certain quantity of papermaking fibers are processed for a while in a tank (under recirculating conditions) and afterwards the slurry as obtained is discharged from the tank.

Danforth, conversely, shows a pulper where the paper residues are broken and sucked away in a continuous process. There is no reason for the skilled in the art to combine the two

references, all the more so if one considers that it would not be possible to arrange the pump intake and the recirculation duct outlet one in front of the other in Danforth. There is no space in the machine disclosed by Danforth where to arrange these members. Indeed, the pump intake of Danforth is arranged underneath the toothed rolls 67. A combination of the two prior art documents is therefore clearly non-obvious.

Applicant again thanks the Examiner for indicating allowable subject matter. If the Examiner has any comments or suggestions which would further favorable prosecution of this application, the Examiner is invited to contact Applicant's representative by telephone to discuss possible changes.

At this time Applicant respectfully requests reconsideration of this application, and based on the above amendments and remarks, respectfully solicits allowance of this application.

Respectfully submitted
for Applicant,

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Enclosed: (1) Sheet of Replacement Drawings

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